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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

LEE, JOHN J

ART UNIT

PAPER NUMBER

2684

DATE MAILED: 07/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/560,380

Applicant(s)

TERVO ET AL.

Examiner

JOHN J LEE

Art Unit

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 12 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-26,28-40,42-53 and 58-92 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6,13-26,28-30,37-40,42-45,47-53,58,60-85,87,88 and 92 is/are rejected.
- 7) ☒ Claim(s) 7-12,31-36,46,59,86 and 89-91 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1-6, 13-26, 28-30, 37-40, 42-45, 47-53, 58, 60-85, 87, 88, and 92** are rejected under 35 U.S.C. 103(a) as being unpatentable over Phillips (US Patent number 6,188,898) in view of Stephenson et al. (US Patent number 6,119,000).

Regarding **claim 1**, Phillips discloses that a method for storing and informing at least one property (adapting to service mobile terminals having different operating protocols) of a wireless communication device (13 in Fig. 1) to a mobile communication network (Fig. 1) (Fig. 1, 2 and abstract). Phillips teaches that storing information relating to at least one property (adapting to service mobile terminals having different operating protocols) of the wireless communication device (13 in Fig. 1) in the home location register (mobile network) (Fig. 1 and column 3, lines 11 – 64), in addition to said information for identifying the wireless communication device (inherently recognizing that during the mobile terminal is registering, the mobile terminal send the own identification to base station) (Fig. 3, column 2, lines 64 – column 3, lines 10, and column 3, lines 30 – 64, where teaches the mobile network stores information including identifiers of the mobile terminal). Phillips teaches that transmitting (request signal) said information for identifying the wireless communication device (13 in Fig. 1) and said

information relating to at least one property of the wireless communication device from the wireless communication device to the mobile communication network (abstract, Fig. 1, 2, and column 2, lines 64 – column 4, lines 27, where teaches the network includes multimode base stations each capable of operating selectively in at least some of said operating protocols and each having means for a mobile terminal so as to determine that terminal's operating protocol (abstract). Moreover, if without informing own protocol information during the initiating communication time, the mobile network could not operate the service for a mobile station. Therefore, the protocol is being employed by the requesting mobile terminal (see column 3, lines 36 – 55).

Phillips does not specifically disclose the limitation “storing a device identifier in a memory of the wireless communication device the device identifier containing information for identifying the wireless communication device to the mobile communication network”. However, Stephenson teaches the limitation “storing a device identifier in a memory of the wireless communication device the device identifier containing information for identifying the wireless communication device to the mobile communication network” (column 7, lines 65 – column 8, lines 51 and Fig. 3, where teaches IMSI (International Mobile Subscriber Identity) comprises a mobile country code, a mobile network code, and a mobile subscriber identification number and IMSI of a subscriber is held in a subscriber identity module that plugs into a mobile station). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Phillips system as taught by Stephenson, provide the motivation

to improve efficient tracking of changes in operative subscriber identity codes in mobile communication system.

Regarding **claim 2**, Phillips and Stephenson disclose all the limitation, as discussed in claim 1. Furthermore, Phillips further discloses that in connection with registration of the wireless communication device to the mobile communication network (abstract, Fig. 1, 2, and column 2, lines 64 – column 4, lines 27).

Regarding **claim 3**, Phillips discloses that the information relating to at least one property of the wireless communication device is transmitted from the wireless communication device to the communication network prior to a call being set-up with the wireless communication device (abstract, Fig. 1, 2, and column 3, lines 11 – column 4, lines 27).

Regarding **claim 4**, Phillips discloses that the information relating to at least one property of the wireless communication device is checked in the mobile communication network during call set-up with the wireless communication device to determine if the wireless communication device is able to receive and handle the call (abstract, Fig. 1, 2, and column 3, lines 11 – column 4, lines 27).

Regarding **claims 5, 30, and 45**, Phillips and Stephenson disclose all the limitation, as discussed in claims 1 and 3. However, Phillips does not specifically disclose the limitation “connection with a handover”. However, Stephenson teaches the limitation “connection with a handover” (Fig. 1, column 5, lines 10 – 22, and column 15, lines 2 – 50, where teaches connection relating to the same communication session across a handover, applies equally to the case where the MSC also changes). It would have been

obvious to one having ordinary skill in the art at the time the invention was made to modify the Phillips system as taught by Stephenson, provide the motivation to improve quality of reception signal in order to further improve connection reliability in mobile communication system.

Regarding **claim 6**, Phillips and Stephenson disclose all the limitation, as discussed in claim 1. Furthermore, Phillips further discloses that the information relating to at least one property of the wireless communication device is transmitted to a mobile service-switching center of the mobile communication network, or a serving GPRS support node (abstract, Fig. 1, 2, and column 3, lines 11 – column 4, lines 27).

Regarding **claim 13**, Phillips and Stephenson disclose all the limitation, as discussed in claim 1. Furthermore, Phillips further discloses that the information relating to at least one property of the wireless communication device transmitted from the wireless communication device to the mobile communication network is stored at least in the mobile services switching center of the mobile communication network (Fig. 1, 2 and column 3, lines 11 – column 4, lines 27).

Regarding **claim 14**, Phillips and Stephenson disclose all the limitation, as discussed in claim 1. Furthermore, Phillips further discloses that the information relating to at least one property of the wireless communication device transmitted from the wireless communication device to the mobile communication network is stored temporarily in the mobile communication network (Fig. 1, 2 and column 3, lines 11 – column 4, lines 27).

Regarding **claim 15**, Phillips discloses that the wireless communication device comprises a mobile phone (Fig. 1, 2 and column 3, lines 11 – column 4, lines 27).

Regarding **claim 16**, Phillips discloses that the wireless communication device has the combined properties of a cellular mobile telephone and a personal digital assistant (Fig. 1, 2 and column 1, lines 10 – 44).

Regarding **claim 17**, Phillips and Stephenson disclose all the limitation, as discussed in claim 1. Furthermore, Phillips further discloses that the wireless communication device comprises a radio card (Fig. 1, 2 and column 1, lines 10 – 44).

Regarding **claim 18**, Phillips discloses that the information relating to at least one property of the wireless communication device contains information about the hardware properties of the wireless communication device (Fig. 1, 2 and column 1, lines 65 – column 2, lines 23).

Regarding **claim 19**, Phillips discloses that the information relating to at least one property of the wireless communication device contains information about the software properties of the wireless communication device (Fig. 1, 2 and column 3, lines 41 – column 4, lines 27).

Regarding **claim 20**, Phillips and Stephenson disclose all the limitation, as discussed in claim 1. Furthermore, Phillips further discloses that the information relating to at least one property of the wireless communication device contains information about at least one preference of the user of the wireless communication device (Fig. 1, 2 and column 2, lines 64 – column 4, lines 27).

Regarding **claim 21**, Phillips discloses that modification of the information relating to at least one property of the wireless communication device by the user of the wireless communication device is prevented (Fig. 1, 2 and column 3, lines 36 – 64).

Regarding **claim 22**, Phillips discloses that establishing a call for transmitting information from another communication device to said wireless communication device, wherein the information is optimized for use by the wireless communication device in the mobile communication network, by using the information relating to at least one property of the wireless communication device transmitted from the wireless communication device to the mobile communication network (Fig. 1, 2 and column 2, lines 64 – column 4, lines 27).

Regarding **claim 23**, Phillips discloses that performing communication between the mobile communication network and another communication device, wherein the information relating to at least one property of the wireless communication device is transmitted to other communication device (Fig. 1, 2 and column 2, lines 64 – column 4, lines 27).

Regarding **claim 24**, Phillips discloses that performing communication between the communication network and another communication network, wherein the information relating to at least one property of the wireless communication device is transmitted to another communication network (Fig. 1, 2, column 2, lines 64 – column 3, lines 28 and column 4, lines 34 – column 5, lines 35).



Regarding **claim 25**, Phillips discloses that the information to be transmitted is converted in said other communication device into a format suitable for the wireless communication device (Fig. 1, 2 and column 2, lines 64 – column 4, lines 27).

Regarding **claim 26**, Phillips discloses that the information to be transmitted is converted in the mobile communication network into a format suitable for the wireless communication device (Fig. 1, 2 and column 2, lines 64 – column 4, lines 27).

Regarding **claim 28**, Phillips and Stephenson disclose all the limitation, as discussed in claims 1 and 2.

Regarding **claim 29**, Phillips and Stephenson disclose all the limitation, as discussed in claims 1 and 3.

Regarding **claim 37**, Phillips and Stephenson disclose all the limitation, as discussed in claims 1 and 15.

Regarding **claim 38**, Phillips and Stephenson disclose all the limitation, as discussed in claims 1 and 16.

Regarding **claim 39**, Phillips and Stephenson disclose all the limitation, as discussed in claims 1 and 17.

Regarding **claim 40**, Phillips and Stephenson disclose all the limitation, as discussed in claims 1 and 25.

Regarding **claim 42**, Phillips and Stephenson disclose all the limitation, as discussed in claims 1 and 2.

Regarding **claim 43**, Phillips and Stephenson disclose all the limitation, as discussed in claims 1 and 3.

Regarding **claim 44**, Phillips and Stephenson disclose all the limitation, as discussed in claims 1 and 4.

Regarding **claim 47**, Phillips and Stephenson disclose all the limitation, as discussed in claims 1 and 13.

Regarding **claim 48**, Phillips and Stephenson disclose all the limitation, as discussed in claims 13 and 14.

Regarding **claim 49**, Phillips discloses a register and wherein information relating to at least one property of the wireless communication device transmitted to the mobile communication network from the wireless communication device is stored in said register (Fig. 1, 2 and column 3, lines 65 – column 4, lines 19).

Regarding **claim 50**, Phillips and Stephenson disclose all the limitation, as discussed in claim 23.

Regarding **claim 51**, Phillips and Stephenson disclose all the limitation, as discussed in claims 6 and 24.

Regarding **claim 52**, Phillips and Stephenson disclose all the limitation, as discussed in claims 1 and 22.

Regarding **claim 53**, Phillips and Stephenson disclose all the limitation, as discussed in claims 1 and 22.

Regarding **claim 58**, Phillips and Stephenson disclose all the limitation, as discussed in claim 1.

Regarding **claims 60 and 66**, Phillips and Stephenson disclose all the limitation, as discussed in claims 1 and 16. Furthermore, Phillips further discloses that the home

location register is further arranged to store information about peripheral devices connected to the wireless communication device (Fig. 3, column 2, lines 64 – column 3, lines 10, and column 3, lines 30 – 64).

Regarding **claim 61**, Phillips and Stephenson disclose all the limitation, as discussed in claims 1 and 22.

Regarding **claim 62**, Phillips and Stephenson disclose all the limitation, as discussed in claims 1 and 22.

Regarding **claim 63**, Phillips and Stephenson disclose that the other communication device is located in a communication network other than the mobile communication network (Fig. 1, 2 and column 2, lines 64 – column 3, lines 28).

Regarding **claim 64**, Phillips and Stephenson disclose all the limitation, as discussed in claims 22 and 63.

Regarding **claim 65**, Phillips and Stephenson disclose all the limitation, as discussed in claim 1.

Regarding **claim 67**, Phillips and Stephenson disclose all the limitation, as discussed in claims 1 and 18.

Regarding **claim 68**, Phillips and Stephenson disclose all the limitation, as discussed in claims 1 and 19.

Regarding **claim 69**, Phillips and Stephenson disclose all the limitation, as discussed in claims 1 and 20.

Regarding **claim 70**, Phillips and Stephenson disclose all the limitation, as discussed in claims 1 and 21.

Regarding **claim 71**, Phillips and Stephenson disclose all the limitation, as discussed in claims 1 and 22.

Regarding **claim 72**, Phillips and Stephenson disclose all the limitation, as discussed in claim 1.

Regarding **claim 73**, Phillips and Stephenson disclose all the limitation, as discussed in claims 1 and 22.

Regarding **claim 74**, Phillips and Stephenson disclose all the limitation, as discussed in claims 22 and 61.

Regarding **claim 75**, Phillips and Stephenson disclose all the limitation, as discussed in claims 1 and 28.

Regarding **claim 76**, Phillips and Stephenson disclose all the limitation, as discussed in claims 1 and 22.

Regarding **claim 77**, Phillips and Stephenson disclose all the limitation, as discussed in claims 1 and 63.

Regarding **claim 78**, Phillips and Stephenson disclose all the limitation, as discussed in claims 1 and 25.

Regarding **claim 79**, Phillips and Stephenson disclose all the limitation, as discussed in claims 1 and 26.

Regarding **claims 80-83 and 85**, Phillips and Stephenson disclose all the limitation, as discussed in claim 1. However, Phillips does not specifically disclose the limitation “the information for identifying the wireless communication device to the mobile communication network contained by the device identifier is in the form of

number series". However, Stephenson teaches the limitation "the information for identifying the wireless communication device to the mobile communication network contained by the device identifier is in the form of number series" (column 7, lines 65 – column 8, lines 51 and Fig. 3, where teaches IMSI (International Mobile Subscriber Identity), that the number is fifteen digits or less, comprises a 3-digit mobile country code, a 2-digit mobile network code, and a mobile subscriber identification number and IMSI of a subscriber is held in a subscriber identity module that plugs into a mobile station). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Phillips system as taught by Stephenson, provide the motivation to improve efficient tracking of changes in operative subscriber identity codes in mobile communication system.

Regarding **claim 84**, Phillips and Stephenson disclose all the limitation, as discussed in claim 1.

Regarding **claims 87 and 88**, Phillips and Stephenson disclose all the limitation, as discussed in claim 1. However, Phillips does not specifically disclose the limitation "the length of field being fixed and field being of a variable length". However, Stephenson discloses the limitation "the length of field being fixed and field being of a variable length" (column 7, lines 65 – column 8, lines 43 and Fig. 3, where teaches each subscriber is uniquely identified by a number and the IMSI number is fifteen digits or less). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Phillips system as taught by Stephenson, provide the

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motivation to improve efficient tracking of user's identity for using the IMSI operating subscriber identity codes in mobile communication system.

Regarding **claim 92**, Phillips and Stephenson disclose all the limitation, as discussed in claims 1 and 87.

***Allowable Subject Matter***

3. Claims 7 – 12, 31 – 36, 46, 59, 86, and 89 – 91 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claims 7 – 12, 31 – 36, 46, 59, 86, and 89 – 91, the prior art fails to disclose “the device identifier is an International Mobile Station Equipment Identity (IMEI) defined for said wireless communication device and is arranged to store both of said information for identifying the wireless communication device to the mobile communication network and said information relating to at least one property of the wireless communication device is stored in the IMEI that comprises a non-modifiable part and a modifiable part, wherein at least part of the information relating to at least one property of wireless communication device is stored in said modifiable part” as specified in the claims 7 – 12, 31 – 36, 46, 59, 86, and 89 – 91.

*Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Donovan et al. (US Patent number 5,940,589) discloses Validating a Subscriber Terminal on a Telecommunication Network.

Shannon et al. (US Patent number 6,032,044) discloses Cellular Communications System with Screening of Unauthorized Services.

Any response to this action should be mailed to:

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(703) 308-9051, (for formal communications intended for entry)

Or:

(703) 308-6606 (for informal or draft communications, please label  
"PROPOSED" or "DRAFT").

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John J. Lee** whose telephone number is **(703) 306-5936**. He can normally be reached Monday-Thursday and alternate Fridays from 8:30am-5:00 pm. If attempts to reach the examiner are unsuccessful, the examiner's supervisor, **Nay Aung Maung**, can be reached on **(703) 308-7745**. Any inquiry of a general nature or

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relating to the status of this application should be directed to the Group receptionist  
whose telephone number is (703) 305-4700.

J.L  
July 1, 2004

John J Lee



**NICK CORSARO**  
**PATENT EXAMINER**